

CLAIMS:

1. A process for producing carbonyl sulphide which comprises, in a first stage, dissolving sulphur in carbon disulphide and, in a second stage, reacting the solution of sulphur in carbon disulphide with a source of carbon and oxygen atoms.
2. A process as claimed in claim 1, and including the step of reacting the solution of sulphur in carbon disulphide with carbon and carbon dioxide.
3. A process as claimed in claim 1, and including reacting carbon dioxide and oxygen to provide carbon monoxide, and reacting the carbon monoxide with the solution of sulphur in carbon disulphide.
4. A process as claimed in claim 1, 2 or 3 and including the further step of separating carbon disulphide from carbonyl sulphide.
5. A process as claimed in claim 4, and including the step of feeding the carbonyl sulphide and the carbon disulphide to a distillation column to separate carbon disulphide from carbonyl sulphide.
6. A process as claimed in claim 1, 2, 3 or 4 and including the step of cooling the carbonyl sulphide and the carbon disulphide carrier using a spray of liquid carbon disulphide and/or a bath of liquid carbon disulphide.

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7. A process as claimed in claim 1, 2 or 3 and including the step of cooling the carbonyl sulphide and the carbon dioxide carrier using a spray of liquid carbon disulphide and/or a bath of liquid carbon disulphide, and feeding the carbonyl sulphide and the carbon disulphide contained therein from the cooling stage to a distillation column in which separation of carbon disulphide from carbonyl sulphide takes place.
8. A process as claimed in claim 4, 5, 6 or 7 and including the step of recycling separated carbon disulphide to said first stage.
9. A process as claimed in claim 7 and including the step of cooling the carbonyl sulphide emerging from the distillation column to produce a stream of carbonyl sulphide for refluxing to the distillation column and a stream of gaseous carbonyl sulphide.
10. A process as claimed in claim 9 and including the further step of liquefying the stream of gaseous carbonyl sulphide.